

### **REMARKS**

Claims 1 and 12 are amended in part to correct antecedent basis. Support for amendments to claims 1 and 12 other than antecedent basis correction may be found, for example, in the specification at [0044]-[0047], [0066], [0057]-[0058], [0061] and [0076]. Claim 3 is amended to reflect changes to claim 1. Claims 5-6 are previously presented. Claims 2, 4 and 9-11 are canceled. Claims 13-17 are new. Support for the new claims may be found, for example, in the specification at [0060]-[0063], [0075]-[0081], and Figs. 9, 19 and 20. Accordingly, claims 1, 3, 5-8 and 12-17 are pending in this application.

Applicants and the Examiner held a telephonic interview on October 9, 2008. At this interview, discussion of proposed claim amendments and the prior art was held. Applicants thank the Examiner for her time.

#### **Claim Objections:**

The status indicator of claim 11 has been corrected to show the claim as canceled. Accordingly, the Applicants request the objection to be withdrawn.

#### **Claim Rejections Under 35 U.S.C. §102**

Applicants respectfully traverse the rejection of claim 5 under 35 U.S.C. 102(e) as being anticipated by *Aboulhosn et al.*, US Patent No. 6,938,042 ("Aboulhosn"). To demonstrate a *prima facie* case of anticipation, the M.P.E.P. § 2131 requires the Office Action to show each and every element of a claim in a single prior art reference:

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TO ANTICIPATE A CLAIM, THE REFERENCE MUST  
TEACH EVERY ELEMENT OF THE CLAIM

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"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Applicants submit that the Office Action has not demonstrated that each and every element of claim 5 is found in Aboulhosn. For example, the Office Action cited to Aboulhosn, 2:3-7 with regard to the element of claim 5 “determining, by the second computing device based on a file replication setting, whether the updated shared file should be replicated on the second computing device.” Applicants, however, do not find any teaching or suggestion of “determining, by the second computing device based on a file replication setting, whether the updated shared file should be replicated on the second computing device” in Aboulhosn, 2:3-7. The cited passage teaches a folder, a file, an actual file, a shared file, and a virtual file, but no “file replication setting” indicating “whether the updated shared file should be replicated on the second computing device” as called for by claim 5.

Furthermore, Applicants submit that the Office Action has not shown a passage of Aboulhosn that teaches or suggests the element of claim 5 “if the file replication setting indicates an on-demand basis, downloading, by the second computing device from multiple computing devices of the group, portions of the updated shared file upon receiving a user-demanded file replication indication.” The Office Action cited to Aboulhosn, 2:3-7, 2:20-22, and 9:47-49 as disclosing a portion of this element, i.e., “if the file replication setting indicates an on-demand basis, downloading, by the second computing device...” Applicants respectfully disagree. As previously discussed, Aboulhosn, 2:3-7 is silent on a “file replication setting,” let alone a “file replication setting indicat[ing] an on-demand basis,” as called for in this element of claim 5. Similarly, Aboulhosn, 2:20-22 also does not teach a “file replication setting,” let alone a “file replication setting indicat[ing] an on-demand basis,” as called for in claim 5. Aboulhosn 2:20-22 mentions a local file system, a shared file, and downloading a shared file when the shared file is accessed by a member who is not the shared file owner, but no “file replication setting” that “indicates an on-demand basis” for file replication.

Additionally, the Office Action’s citation to Aboulhosn 9:47-49 also does not teach a “file replication setting indicat[ing] an on-demand basis.” Aboulhosn 9:47-49 refers to a part of Aboulhosn’s claim 1. The metadata of Aboulhosn’s claim 1 was cited by the Office Action, page 3 as teaching the element of claim 5 “creating, at the first computing device, metadata associated with the updated shared file.” This single reference to

Aboulhosen's metadata for a file may not be used as teaching two distinct elements of claim 5, i.e., both "metadata associated with the updated shared file" and "a file replication setting indicat[ing] an on-demand basis." The M.P.E.P. 2143.03 is clear that "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." In other words, because claim 5 recites two distinct elements: 1) "metadata associated with the updated shared file," and 2) "a file replication setting indicat[ing] an on-demand basis," the Office Action must provide support that Aboulhosen also discloses these two distinct elements. The Office Action failed to do so, as it only cited to the single metadata reference of Aboulhosen as teaching both the "metadata associated with the updated shared file" and "a file replication setting indicat[ing] an on-demand basis" of claim 5. The Office Action appears to assume that a file replication setting is incorporated into metadata, however, claim 5 clearly recites two, distinct separate elements.

Additionally, with further regard to the element of claim 5 "if the file replication setting indicates an on-demand basis, downloading, by the second computing device from multiple computing devices of the group, portions of the updated shared file upon receiving a user-demanded file replication indication," the Office Action did not cite to any portion of Aboulhosen that teaches this element. The Office Action was silent on any passage from Aboulhosen that teaches, discloses or suggests this missing element.

Moreover, with regard to the element of claim 5 "if the file replication setting indicates automatic replication, automatically downloading, by the second computing device from multiple computing devices of the group, portions of the updated shared file," Applicants submit that the Office Action's citation to Aboulhosen, 1:59-2:23 does not teach this missing element. Aboulhosen, 1:59-2:23 is silent on a "file replication setting," let alone a "file replication setting indicat[ing] automatic replication," as called for by claim 5. This passage of Aboulhosen teaches group files, a group folder, a shared file, a virtual file, a folder of the file owner, and metadata of the shared file, but not a "file replication setting indicat[ing] automatic replication." As previously discussed, if the Office Action cites to Aboulhosen's metadata reference to teach the "metadata" of claim 5, the Office Action is required to demonstrate another distinct element from Aboulhosen as teaching a "file replication setting indicat[ing] automatic replication." The Office Action simply has not done so.

Furthermore, Alboulhosn's metadata does not contain any teaching of different file replication settings, let alone an automatic replication setting and an on-demand setting: "...the metadata may identify the file name, the file owner, the create date of the file, the last modified date of the file, the size of the file, and so on" (Alboulhosn, 2: 26-30). Alboulhosn merely teaches the metadata containing identifying characteristics of a specific file, and not settings that indicated when and how a file should be replicated.

Still, with further regard to the element of claim 5 "if the file replication setting indicates automatic replication, automatically downloading, by the second computing device from multiple computing devices of the group, portions of the updated shared file," the Office Action did not cite to any portion of Aboulhosn that teaches downloading from multiple computing devices. The Office Action was silent on any passage that teaches, discloses or suggests downloading "from multiple computing devices of the group, portions of the updated shared file," as called for in claim 5.

Still further, Applicants submit that the Office Action has not cited to a passage of Aboulhosn that teaches the element of claim 5: "automatically downloading, by the second computing device from multiple computing devices of the group, portions of the updated shared file wherein the multiple computing devices of the group are selected based upon at least one from a set of routing factors comprising: IP address and least routing time." The Office Action cited to Aboulhosn, 3:1-13 as disclosing this element. While Aboulhosn, 3:1-13 does mention an IP address, it does not, however, teach a computing devices using this IP address to select multiple computing devices from the group for an automatic download, as called for by this missing element of claim 5. Aboulhosn teaches providing the IP address for message addressing purposes, not selection for automatic downloading portions of an updated, shared file: "When a member goes online its access information (e.g., IP address) is provided ... so that other members of the group can send messages... to that member" (Alboulhosn, 3:3-7). Alboulhosn 3:1-13 is silent on using IP addresses for selecting multiple computing devices from which to automatically download portions of an updated shared file, as called for by claim 5.

Claim 5 provides benefit over Aboulhosn as options are provided to the user to indicate when file replication should occur. For instance, a user may choose "on-demand" to have more control over disk space usage at a computing device. Or, in another instance, a

user may choose “automatic replication” to save the bother of having to respond to each update from other computing devices.

Additional benefit by amended claim 5 over Aboulhossn is provided as portions of the downloaded file may be obtained from multiple computing devices. This may enable the speed of downloading to be quicker by downloading portions of the file from closer (in distance or otherwise) computing devices. Aboulhossn is not able to optimize downloading speed as he necessarily teaches going to a single computing device, independent of distance, to retrieve the file.

For at least the above reasons, Applicants respectfully submit that the Office Action has not shown passages of Aboulhossn that teach, disclose, or suggest each and every distinct element of claim 5. Accordingly, the Office Action has failed to establish a *prima facie* case of anticipation for claim 5, and claim 5 is allowable under 35 U.S.C. §102(e) over Aboulhossn.

#### Claim Rejections Under 35 U.S.C. §103

Claims 1, 3, 9-10 and 12 were rejected under 35 U.S.C. 103(a) as being obvious over Aboulhossn in view of *Wolff*, US Patent No. 6,009,427 (“Wolff”) and Windows 98, Second Edition, by Paul McFredries, September 1999 (“Windows 98”). Applicants respectfully traverse this rejection, and submit that a *prima facie* case of obviousness cannot be established for amended claims 1, 3 and 12, and has not been established for claims 9 and 10 for at least the reasons detailed below.

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Claims 6-8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Aboulhossn in view of *Taylor et al.*, US Patent No. 5,754,306 (“Taylor”). Applicants respectfully traverse this rejection for reasons detailed below.

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#### **Claim 1:**

Applicants respectfully submit that a *prima facie* case of obviousness for amended claim 1 cannot be established by Aboulhossn in view of Wolff and Windows 98 for at least the following reasons.

Wolff Changes the Principle of Operation of Aboulhosn:

For example, Applicants submit that a *prima facie* case of obviousness cannot be established for amended claim 1 by Aboulhosn in view of Wolff, as modifying Aboulhosn with Wolff changes the principle of operation of Aboulhosn. According to the M.P.E.P. §2143.01 VI., a proposed modification cannot change the principle of operation of a reference:

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Applicants submit that modifying Aboulhosn with Wolff changes the principle of operation of Aboulhosn. The principle of operation of Aboulhosn uses a peer-to-peer file sharing system between computers, where a shared file has a file owner who is a member of the group. Shared files may be located across the group at various members (Aboulhosn, 1:12-14 and 1:59-2:8).

By distributing the location of shared files across members and computers, Aboulhosn attempts to overcome the inherent problems of centralized file systems (Aboulhosn, 1:20-26), such as massive storage space requirements and download bandwidth limitations. Wolff, however, teaches the exact centralized file sharing system from which Aboulhosn teaches away (Wolff, Fig. 2A, references 64 and 66). Wolff's files or databases are physically located in a centralized database (Wolff, Fig. 2A, refs. 64, 66), and not across client members (Wolff, Fig. 2A 54, 56).<sup>1</sup> Wolff does not teach the distribution of his database (64,66) itself across client computers, but instead teaches the distribution of the *control* of his database via an access control table 206 and volume control table 208 (Wolff, 3:38-45, 8:50-9:3).

If Wolff is applied to Aboulhosn, Wolff would require the shared files to be moved back into a centralized database, thus changing the basic nature of Aboulhosn's

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<sup>1</sup> Note that in Fig. 2A, Wolff's references 200 and 202 are copies of the database (Wolff, 8:6-7), but not the actual database itself (Wolff, references 64, 66 and 7:67-8:3).

distributed file sharing across a peer-to-peer network. Indeed, as previously discussed, Aboulhosn teaches away from centralized file storage (Aboulhosn, 1:20-26). One trying to solve the problems of Aboulhosn's distributed file sharing simply would not look to the centralized file system of Wolff to find a solution. Aboulhosn modified by Wolff changes the general principle of operation of Aboulhosn, namely, files located across members of a network instead of a centralized database.

M.P.E.P. §2143.01 VI is clear that if a proposed modification changes the principle operation of the prior art, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. Accordingly, Applicants submit that for at least this reason, a *prima facie* case of obviousness for amended claim 1 cannot be established by modifying Aboulhosn with Wolff.

Missing Elements:

Furthermore, Applicants respectfully submit that no combination of Aboulhosn, Wolff or Windows 98 teaches, suggests or discloses each and every element of amended claim 1. For example, Applicants submit that no combination of Aboulhosn, Wolff or Windows 98 teaches the element of amended claim 1:

...sending a direct communication from the first user over the serverless peer-to-peer network to a second computing device used by the at least one other user that has permission to receive the communication ...

The Office Action, page 7, cited to Aboulhosn, abstract, 2:47-48, 3:7-9, and 10:6-7 as allegedly teaching this element.

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Applicants respectfully disagree. In each of the above cited Aboulhosn passages, Aboulhosn teaches the **file owner** sending the communication. Indeed, the Office Action construed a "file" of Aboulhosn to be the "first folder object" of amended claim 1 (Office Action, page 6), and alleged that the first user of amended claim 1 is the file owner of Aboulhosn: "identifies the other members of the group and sends the updated metadata to each member, the first user [file owner]..." (Office Action, page 7).

Amended claim 1, however, specifically distinguishes the first user as a separate and distinct entity from the file or first folder object owner: "...the shared space peer-to-peer group comprising a shared space peer-to-peer group owner, a first folder object owner, the first user and at least one other user..." As previously discussed, the M.P.E.P. 2143.03 is clear that "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." In other words, because amended claim 1 recites four distinct elements: 1) "a shared space peer-to-peer group owner," 2) "a first folder object owner," 3) "a first user" and 4) "a second user," each element must be treated distinctly and cannot be construed to be the same entity. Thus, as a first folder object owner and a first user are each distinctly claimed elements of amended claim 1, a first folder object owner cannot be a first user, and Aboulhosn's description of a file owner sending a communication does not anticipate the element of amended claim 1: "sending a direct communication from the first user over the serverless peer-to-peer network to a second computing device used by the at least one other user that has permission to receive the communication."

Indeed, Aboulhosn does not appear to teach, suggest or disclose a non-file owner or a non-group owner sending updates to other group members. Aboulhosn appears to teach the file owner (or the group owner, as the file owner's proxy) to be a gatekeeper for any file operations. Any file operation is required by Aboulhosn to be distributed through the file or group owner. The present application provides benefit over Aboulhosn as the present application does not require a gatekeeper for file operations in a shared space of a peer-to-peer group. Any member may perform file operations for objects within the shared space, without the need to rely on a gatekeeper for permission or coordination. This allows for both increased file operation flexibility as well as a decrease in the chances of bottlenecks at the gatekeeper. Furthermore, both message traffic across the network and delay of file operations may be minimized with the present application as compared to Aboulhosn.

Neither Wolff nor Windows 98 were relied on by the Office Action as teaching this missing element, nor were they used for this purpose. Accordingly, for at least the reasons discussed above, Applicants submit that a *prima facie* case of obviousness cannot be established for amended claim 1 by Aboulhosn in view of Wolff and Windows 98. Therefore, amended claim 1 is allowable under 35 U.S.C. §103(a) over Aboulhosn, Wolff and Windows 98.

**Claims 3 and 12:**

Claims 3 and 12 each depend from amended claim 1, and therefore incorporate by reference each and every element of amended claim 1. Applicants respectfully submit that for reasons similar to amended claim 1, dependent claims 3 and 12 are also allowable under 35 U.S.C. §103(a) over Aboulhosn, Wolff and Windows 98.

**Claims 6-8:**

Claims 6-8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Aboulhosn in view of Taylor. Following the rejection, in the subsequent text of the Office Action on pages 14-15, however, the Office Action appeared to refer to rejecting claims 6-8 as being unpatentable over Aboulhosn in view of Wolff, in further view of Windows 98, and in further view of Taylor. Applicants respectfully traverse both the explicit and implicit rejections.

Claim 6 depends from claim 5, claim 7 depends from claim 6, and claim 8 depends from claim 7. Thus, each of claims 6-8 incorporate by reference each and every element of claim 5.

With respect to the explicit rejection (Aboulhosn in view of Taylor): as previously discussed, the Office Action has not established a *prima facie* case of anticipation for claim 5 as the Office Action failed to show that Aboulhosn teaches each and every element of claim 5. Moreover, the Office Action did not cite to any additional passages in Taylor as teaching the missing elements of claim 5, nor was Taylor used for this purpose. Dependent claims 6-8 each incorporate each and every element of claim 5. Therefore, the Office Action has not demonstrated a combination of Aboulhosn and Taylor that teaches, discloses or suggests each and every element of claims 6-8, and thus has failed to establish a *prima facie* case of obviousness for claims 6-8 by Aboulhosn in view of Taylor. Accordingly, Applicants submit that dependent claims 6-8 are allowable under 35 U.S.C. §103(a) over Aboulhosn and Taylor.

With respect to the implicit rejection (Aboulhosn, Wolff, Windows 98 and Taylor): as previously discussed, the Office Action has not established a *prima facie* case of anticipation for claim 5 as the Office Action failed to show that Aboulhosn teaches each and every element of claim 5. Furthermore, the Office Action did not cite to any additional passages in Wolff, Windows 98 or Taylor as teaching the missing elements of claim 5. The Office Action did not use Taylor for this purpose, and the Office Action was silent regarding Wolff and Windows 98 with respect to claim 5.

Dependent claims 6-8 each incorporate each and every element of claim 5. Therefore, the Office Action has not demonstrated a combination of Aboulhosn, Wolff, Windows 98 and Taylor that teaches, discloses or suggests each and every element of claims 6-8, and thus has failed to establish a *prima facie* case of obviousness for claims 6-8 by Aboulhosn in view of Wolff, Windows 98 and Taylor. Accordingly, Applicants submit that claims 6-8 are allowable under 35 U.S.C. §103(a) over Aboulhosn, Wolff, Windows 98 and Taylor.

New Claims 13-17:

New independent claim recites elements of claim 5 above, for example:

determining, by the second computing device, whether the updated shared file should be replicated on the second computing device, the determining based on a file replication setting of the second computing device, the file replication setting selected by a user of the second computing device, comprising:

if the file replication setting indicates an on-demand basis, downloading, by the second computing device from multiple computing devices of the group, portions of the updated shared file upon receiving a user-demanded file replication indication, and

if the file replication setting indicates automatic replication, automatically downloading, by the second computing device from multiple computing devices of the group, portions of the updated shared file.

For at least the reasons discussed above with regard to these limitations, new independent claim 13 is allowable over the cited art. Because claims 14-17 depend from allowable claim 13, they each include each and every element of independent claim 13. Furthermore,

Applicants submit that no combination of Aboulhosn, Wolff and Taylor teach each and every limitation of the dependent claims 14-17. For at least these reasons, Applicants submit that dependent claims 14-17 are also allowable over the cited art.

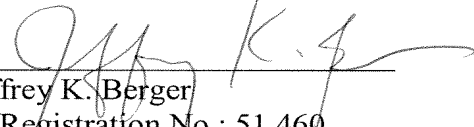
### **CONCLUSION**

In view of the above amendment and arguments, Applicants submit the pending application is in condition for allowance and an early action so indicating is respectfully requested.

The Commissioner is authorized to charge any fee deficiency required by this paper, or credit any overpayment, to Deposit Account No. 13-2855, under Order No. 30835/306546, from which the undersigned is authorized to draw.

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Respectfully submitted,

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